OK

Depth 6	Contents 7	Reference to last Measurement 8

M. A. R. 57 (Rule 116)
Measurement Book

No. B 427038

...rd and final Bill

...rk ..... From ..... To .....

...tractor of nature of Agency ....M.D. Srinivas, Contractor, Bangalore.

...mencement of work ....D.O. Recording: 24.09.2019

Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
Name of Work :	Constn of Additional Class Rooms to Govt Higher primary school of Singapura in Ward no. 11					
Estimated cost	Rs: 20.00 Lakhs					
Page no	: 011-15-000057					
Classification no	: EE/BTD/BBMP/E-pmt/T-18 (28641) WO/87/2018-19 Dt. 30-08-2018					
	: DS/CBC(Y-1C)/230/17-18 Dt. 20.01.2018					
	: TS/EE(BTD)/51/2017-18 Dt. 20.01.2018					

MEASUREMENT BOOK

Date 1	Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	modified T.S. No = BB(MP)CFL/TS/42/PR/25/2018-19 Dt. 28.10.18						
	Approved Est. cost as per modified Est = Rs 19,78,899.00						
(1)	Earth work excavation for foundations of buildings, lifts, sanitary lines and electrical conduits either in pits or in trenches 1.50m and above in 1.50m and above in width in ordinary soil not exceeding 1.50m in depth including dressing the bottom and sides of pits and trenches, stacking the						

OOK

th	Depth 6	Contents 7	Reference to last Measurement 8
s	Y2	PR/25/2018-19	
28.10.18			
of buildings, W/S			
the in pits dis in			
are in widths in			
) including drawing			
, standing the			

M. A. R. 57 (Rule 116)
Measurement Book

No. B 427039

Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
	Number 3	Length 4	Breadth 5	Depth 6	7	8
[illegible] soil clear from edges of excavation with [illegible] breaking of clods complete as per specifications						
qty as per this MB, p.no 427071						
qty upto last		2 no. (Ta) =	105.91 m³	@ 204.12/m³		21628-00
qty as do.		2 no. (CB)				
			= 62.93 m³	@ 204.12/m³		12845-00
[illegible] pasting plain cement concrete of						

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	mix 1:4:8 with opc cement @ 180 kg with 40mm and down size graded granite metal coarse aggregate 0.85 m³ and fine aggregate @ 0.57 m³ machine mixed. Concrete laid in layers not exceeding 15 cms thick well compacted into form, including curing all material, labour, hire of machinery, curing complete as per specification						
	(a) - qty upto 1.25 m.	qty inside of this m.B			= 29.34 m³ @	427071 / 5256.36/m³	154222.00
	(b) - qty above 1.25 m.	= qty inside			2(b)	p.no 427071	
		of this m.B			= 38.61 m³ @ 5256.36/m³		202948.00

OOK

	Depth 6	Contents 7	Reference to last Measurement 8
...y's with 40mm ...ure aggregate ...chine mixed. ...thickness ...ll material, labour ...specification			
...w. (3a) = p.no 427071			
= 29.34 m³ @ 5256.36/m³			154222.00
...w. 2(b) p.no 427071			
= 38.61 m³ @ 5256.32/m³			202948.00

M. A. R. 57 (Rule 116)
Measurement Book

No. B

427040

...No. .....

...of Work ..... From..... To.....

...of Contractor of nature of Agency .....

...of commencement of work .....

Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
Providing and constructing granite / trap / basalt s.s. masonry for flooding with cement stone hammer dressed in courses not less than 20cm high, bond stones @ 2mts apart. Each course is cluding cutting material, labour, curing complete as per specification.						
as per side ... no. (3) p.no 427072 of this M.B.				=	10.50 m³ @ 4524.96/m³	47481.00
providing and constructing granite / trap / basalt s.s. masonry in						

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	basement with C.M 1:6 Edges of stone chiselled dressed in courses not less than 15cm high and stretch 2m apart in each courses, including cost of material, labour, curing complete as per specifications.						
	Shop	1×2	4.00	0.60	1.00	4.80 m³	
		1×2	3.00	0.60	1.00	= 3.60	
						8.40 m³	
						@ 5495.40/m³	45405.0
7)	Providing raked pointing to coursed stone masonry with C.M 1:3, 20mm deep, after raking joints to depth of 20mm including cost of material, labour						

BOOK

dth	Depth 6	Contents 7	Reference to last Measurement 8
		chisle dressed	
		stones 2m	
		material, labour,	
	1.00 ×	4.80 m²	
	1.00 =	3.60	
		8.40 m²	
		@ 545.40/m²	4540.0
		e many with	
		joints to depth of	
		material, labour	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 427041

Name of Work ..... From..... To.....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
Excavating complete as per specifications.						
	2 × 1	4.00	-	1.00	= 8.00	
	2 × 1	3.00	-	1.00	= 6.00	
					14.00 m²	1482.00
					@ 105.84/m²	
Providing and removing centering, shuttering, strutting; supporting the and removing from work for footing, footings, through columns, for mass concrete including cutting and wastage, labour, complete as per specification.						

Qty as per Item (4) = P.No. 427072 — 36160.00
= 144.94 m² @ 249.48/m²

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
9)	Providing and laying in position reinforced cement concrete of design mix M.20 with ordinary cement @ 320 kgs with 20mm nominal downsize graded granite metal coarse aggregate, 60.8 kgs and fine aggregate @ 0.459 kgs with superplasticizer @ 3 ltr conforming to IS. 9103-1999 re-approved 2002 machine mixed concrete laid in layers not exceeding 15 cms thick vibrated for all works in foundation plinth and ground floor level etc complete.						
	column	10 Nos	0.45	0.20	4.00	= 3.60	
		8	0.30	0.30	4.00	= 1.08	
	beam	1	38.10	0.20	0.20	1.52	

T BOOK

sions Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
forced cement concrete			
...t e 320 kg with			
metal coarse aggregate,			
...s with superplasticizer			
...approved 20 mm metal			
...ed 15 kg thick			
...ch of and grout			
0.20	4.00	3.60	
0.30	4.00	1.08	
0.20	0.20	1.52	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 427042

...No. .....
...of Work ..... From..... To.....
...of Contractor of nature of Agency .....
...of commencement of work .....

Full description, etc, of work 2	Dimensions Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
Beam	2	4.80	0.30	0.45	1.30	
Foot Beam	1	14.10	0.30	0.30	1.27	
	5	1.60	0.30	0.30	0.72	
Tie-Beam	1	38.10	0.20	0.45	3.43	
Roof Slab	1	14.10	7.10	0.15	15.02	
	1	30.00	4.50	0.125	16.87	
	1	30.00	4.45	0.125	16.68	
	1	30.00	4.50	0.125	16.87	
	1	8.50	4.45	0.125	4.72	
	1	4.00	3.00	0.15	1.80	
					84.86 m³	
...pro 125 f	= 67.41 m³	@	6491.88/m³			437634.00
...Block .125 f	= 17.45 m³	@	6491.88/m³			113264.00

Assistant Executive Engineer
Vijayaranyapura Sub Division
BBMP, Bangalore-97

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
18)	Providing mild steel reinforcement for RCC work including straighting, cutting, bending, hooking, placing in positions, lapping and or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design.						
						27 nos. (5)	from 427074
						of this mbs	= 3.72 M.Tons
						@ 60534/M.T	= 224994.0
19)	Providing and removing centering, shuttering, struting, propping etc and removal of form work for plat sunken slab						

M. A. R. 57 (Rule 116)
Measurement Book

No. B

427043

Book No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Full description, etc, of work 2	Dimensions Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
Supplied flats, roofs, landing, balconies and lintels, thickness upto 200mm, including cutting all material, labour complete as per specification.						
Roof slab	1	6.80	4.80	-	32.64	
	1	6.55	4.80	-	31.44	
	1	14.10	1.60	-	22.56	
	2	14.10	0.15	-	4.23	
	2	7.00	0.15	-	2.10	
					92.97 m²	
					@ 331.78 m²	30846.00

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
B)	Providing and constructing load bearing wall with solid concrete blocks of size 400x150x200 mm having block density not less than 1200 kg/m³ and having a minimum average compressive strength of 4.00 N/mm² conforming to IS 2185 Part 2 and constructed with CM 1:4 as per IS 2572 2005 including cost of all materials etc complete.						
	LW	2	14.10	-	3.00	84.60	
	S.W	3	4.95	-	3.00	44.55	
	parapet	2	14.10	-	0.90	25.38	
	——	2	6.70	-	0.90	12.06	
	Stage	1	3.00	-	0.20	0.6	

Contents 7	Reference to last Measurement 8
d Concrete	
ing work	
ge	
13.2180	
12.025	
84.60	
44.58	
25.38	
12.06	
0.6	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 427044

No. .....

Name of Work ..... From..... To.....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	2	1.15	–	0.20	0.46 m²	
deduct					167.65 m²	
"	2	0.90	–	2.10	3.78	
	8	1.50	–	1.20	14.40	
Lintel	1	38.10	–	0.20	7.62	
Beam	1	38.10	–	0.45	17.15	
					42.95 m²	
		Net =	167.65 – 42.95			
		=	124.71 m² @	979.56/m²		122156.00
Providing & laying Stengal cement based Water proofing						

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore-97

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	treatment including preparations of surface required for treatment of Roof, balconies, terraces, etc consisting of following applications. i.e. applying and grouting a slurry coat of neat cement, using 2.75 kg/m² of cement admixed with proprietary waterproofing compound conforming to IS-2645 over the RCC slab after cleaning the surface before treatment. etc long e.c using broken bricks, bats 25 mm to 100mm size with 50% cement mortar 1:5 admixed with proprietary waterproofing compound conforming to IS-2645 over 20mm thick layer of c.m 1:5 admixed with proprietary waterproofing compound of required slope						

Contents 7	Reference to last Measurement 8
[illegible]	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 427045

Book No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
	Number 3	Length 4	Breadth 5	Depth 6		
[illegible] complete as per specification.						
	1	14.10	7.10	-	100.11 m²	97739.00
					@ 976.32/m²	
Providing 12mm thick cement plastering single coat on ceiling including rounding off corners wherever required including rendering, providing and removing scaffolding complete including cost of material, labour, curing complete as per specification.						
	1	6.80	4.80	-	32.64	

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
		1	6.55	4.80	-	31.44	
		4	4.80	0.45	-	8.64	
		5	1.80	0.30	-	2.70	
		1	14.10	0.30	-	4.23	
						79.65 m²	
					e	208.44 m²	11602.0
16)	Providing 18mm thick cement plaster in single coating limit up to brick masonry including rounding off corners, wherever required dressing, providing and removing scaffolding, including curing material, labour curing complete as per specification.						
	Ontrol	4	4.80	-	3.00	57.60	

OK

Depth 6	Contents 7	Reference to last Measurement 8
-	31.44	
-	8.64	
	2.70	
-	4.23	
	79.654	
e	208.44 m²	1602.00
gle corners		
for corners		
ady work		
al, labour		
3.00	51.60	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 427046

Book No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
	2	6.80	-	3.00	40.80	
	2	6.55	-	3.00	39.30	
	1	14.10	-	3.00	42.30	
					180.00 m²	
Deduct	2	0.90	-	2.10	3.78	
	8	1.50	-	1.20	14.40	
					18.18 m²	
		net qty	= 180.00 - 18.18 m²			
			= 161.82 m² @ 238.68/m²			38623.00
Providing lime rendering for plastering to wall and pillars including cost of material, labour, curing complete						

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore-97

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	as per specification.		qty as per [illegible] no				
						= 241.474 m²	6520.00
						@ 27 m²	
18)	Providing Wall black boards 15 cm 1:3 with 2 coating black paint including finishing etc complete						
		2	2.30	1.15	–	5.29 m²	
						@ 99 2.52/m²	250.00
19)	Providing 18mm thick cement plastering single coat with C.M 1:6 to brick work including rounding off corners wherever required & mach Rending, providing w/ removing & refinishing, including cutting material, labour						

OOK

Depth 6	Contents 7	Reference to last Measurement 8
17 no		
241.47 m²		6520.00
e 27 m²		
working blocks		
–	5.29 m²	
e 99	2.52/m²	250.00
gle coat	white	
th cement		
smalty w/		
ed, labour		

M. A. R. 57 (Rule 116)
Measurement Book

No. B

427047

No. .....

Name of Work ..... From..... To.....

Name of Contractor of nature of Agency .....

Date of commencement of work .....

Full description, etc, of work 2	Dimensions Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
Supply complete as per specification.						
Outside	1	14.10	.	4.13	58.23 m²	
	1	5.35	–	4.13	44.19	
					102.42 m²	
					e 243.94/m²	24902.00
Supply & fabrication of prestressed steel door frames						
manufactured from 1.20 thick carbon						
steel strips with mitred joints						
for door opening and shutters made outof						
wood, stylish of 20 mm thick with						

CAFC
Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	lock rail of 160mm, width, top and side rails of 100mm width and bottom rail of 250mm width and panel filling with 12mm thick particle board of exterior grade bonded with phenol formaldehyde resin and the shutters shall be Rot proof etc complete as per specification						
	Door	2	0.90	–	2.10	3.7842 @ 3780/m²	14288-00
2nd	supplying and fixing pressed steel window frame of size 1000 x 500mm manufactured from 1.25 mm						

Contents 7	Reference to last Measurement 8
...ts of ...ths and ...l of ...ible. ...ll	
3.7842 / 3780/ul ...ndow 1.25 m	14288--

M. A. R. 57 (Rule 116)
Measurement Book

No. B

427048

...of Work ..... From..... To.....

...of Contractor of nature of Agency .....

...of commencement of work .....

Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
	Number 3	Length 4	Breadth 5	Depth 6		
[illegible] carbon steel or imported steel straps with [illegible] welded joints at 90° of window openings shall be welded to m.s. grills as per design and drawings using 12mm dia-Rods at 100mm c/c horizontally [illegible] strong m.s. flats of 50mm x 40mm size at 150mm spaced welded into a frame of 60x40mm m.s. flats [illegible] size lugs and studs of 100mm height say [illegible] stray pins and 4 nos of 10mm bolts [illegible] half galvanized and half galvanized with						

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Shutters made of deal and hardwood wood stiles of 30mm thick and 100mm width and rails of 30mm thick and 100mm width and using 4mm thick pin headed glass and panel filling with 12mm thick particle boards of exterior grade. etc complete						
	Wardrobes.	8	1.50	-	1.20	= 14.40m²	
					Total	14.40m²	
	9 by upto 12ft		= 13.13m²	@	4100/m²		53865.-
227	—"— only above 12ft		= 1.28m²	@	4100/m²		5293.-

Contents	Reference to last Measurement
7	8
...s of thicky wedges bounds	
14.40m²	
14.40m²	
	53865.00
	5233.00

M. A. R. 57 (Rule 116)
Measurement Book

No. B 427043

Name of the .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
	Number	Length	Breadth	Depth		
2	3	4	5	6	7	8
Flooring with 25mm to 40mm thick polished tandur black stone slab with c.m 1:6, 25mm thick over existing R.C.C bed in hydraulic lime and level and grade with cement slurry mixed with pigment to match the shade of the slab, including curing material, labour fitting, grouting complete as per specification.						
Room-1	1	6.80	4.80	-	32.64m²	
	2	6.80	0.12	-	1.36	
	2	4.80	0.12	-	0.96	
Room-2	1	6.55	4.80	-	3.44	

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	Slurry	2	6.55	0.10	–	1.31	
		2	4.80	0.10	–	0.96	
		1	14.10	1.60	–	22.56	
		1	1.60	0.10	–	0.16	
		1	14.10	0.10	–	1.41	
		1	5.50	4.80	–	26.40	
		2	5.50	0.10	–	1.10	
		2	4.80	0.10	–	0.96	
		2	5.50	4.80	–	52.80	
		4	5.80	0.10	–	2.32	
		4	4.90	0.10	–	1.96	
						178.34 m²	
				e 1210.68		215913.00	
2m)	Providing of applying 2 coats white			0.1 bond distemping			

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore-97

OK

Depth 6	Contents 7	Reference to last Measurement 8
	1.31	
	0.96	
	22.56	
	0.46	
	1.41	
	26.40	
	1.10	
	0.96	
	52.80	
	2.32	
	1.96	
	178.34 m²	
.68	@	215913.00
	distemping	

M. A. R. 57 (Rule 116)
Measurement Book

No. B 427050

Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
	Number 3	Length 4	Breadth 5	Depth 6		
Supply of broom and shade on wall surface including prung back with distempers primer after thoroughly brushing the surface free from mortar drops and other foreign matter including cost of preparing the surface even and level space, cutting material, labour complete as per specification.						
	qty as per MB =					
				= 241.47 m² @ 76.68/m²		18516.00

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
25)	Provisioning of finishing external walls in 2 coats with waterproofing cement paint of approved brand and shade to give an even shade after thoroughly brushing the surface to remove all dirt and loose powdered material, free from mortar drops and other foreign matter, costing materials, labour etc complete						
		qty as per Dr no (19)					
			102.42 m²	@ 90.72/m²		9292.00	
26)	Provisioning fixing in wall 4.00 kg/sq.m x 100 mm roof down water pipe 90mm outer dia, approved make						

OK

Depth 6	Contents 7	Reference to last Measurement 8
2 coats with brush and roughly brooms e pointed with fresh cement		
(19)		
12/42	9292.00	
2 pole roof work made		

M. A. R. 57 (Rule 116)
Measurement Book

No. B 427051

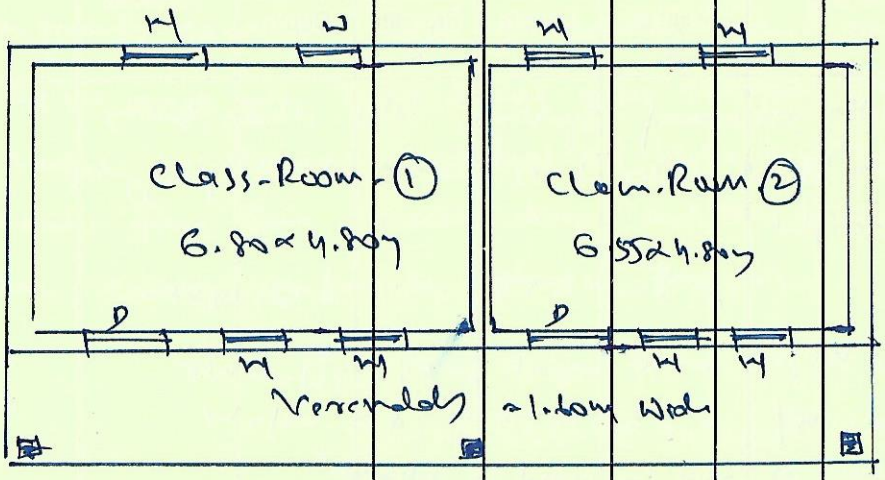
No. .....
Name of Work ..... From..... To.....
Name of Contractor of nature of Agency .....
Date of commencement of work .....

Full description, etc, of work 2	Dimensions: Number 3	Length 4	Breadth 5	Depth 6	Contents 7	Reference to last Measurement 8
Brush brush with necessary specials, like elbows, bends and sockets to fixed with 1:3 clamp wall plugs complete.						
	8	6.50	-	= 52.00 Mtr		
Add extra upto 125 f.	= 15.00 Mtr @ 462.32/- per Mtr					~~8941.00~~
Add extra above 125 f	= 37.00 Mtr @ 462.24/- per Mtr					~~17103.00~~
"above rate not included in schedule"					Total	19,55,038.00

24/05/2019

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

MEASUREMENT BOOK

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
							

first floor plan

24/08/19

Assistant Executive Engineer
Vidyaranyapura Sub Division